## REMARKS

Claims 1-12 are pending in this application, claims 7-9 and 12 having been withdrawn from consideration. By this Amendment, claims 1, 6 and 11 are amended. Support for the amendments to claims 1, 6 and 11 can be found, for example, at page 1, lines 13 to 16 of the instant specification and in original claims 1, 6 and 11. No new matter is added. In view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

Rejection Under 35 U.S.C. §102

The Office Action rejects claims 1, 3-6 and 10 under 35 U.S.C. §102(b) over U.S. Patent No. 5,680,188 to Yoshida et al. ("Yoshida"). Applicants respectfully traverse the rejection.

Claim 1 recites "[a]n optical element comprising: a liquid crystal layer made by forming and curing a film of a liquid crystalline material, the liquid crystal layer including a liquid crystal phase that is solidified so as to maintain a molecular orientation of the liquid crystal phase; and a protective layer formed on the liquid crystal layer, the protective layer having a hardness sufficient to prevent the liquid crystal layer from being deformed by externally exerted forces." Yoshida does not teach or suggest such an optical element.

The Office Action asserts that Yoshida discloses an optical element comprising a liquid crystal layer made of a liquid crystalline material and a protective layer formed on the liquid crystal layer. The Office Action further asserts that protective layer has a hardness high enough to prevent the liquid crystal layer from being deformed. Notwithstanding these assertions, Yoshida does not anticipate and would not have rendered obvious the optical element of claim 1.

Claim 1 requires a liquid crystal layer including a liquid crystal phase that is solidified so as to maintain a molecular orientation of the liquid crystal phase, the liquid crystal layer

having a protective layer formed thereon. Yoshida discloses a liquid crystal display including a composite film 416 composed of a polymer resin and a liquid crystal. *See* column 17, lines 24 to 25; FIG. 19. The liquid crystal display further includes a protective plate 421. *See* column 20, lines 5 to 11; FIG. 19. However, the liquid crystal of Yoshida is not solidified so as to maintain the molecular orientation of the liquid crystal. Rather, the molecular orientation of the liquid crystal of Yoshida must remain changeable to enable function of the disclosed liquid crystal display. Yoshida specifically discloses that, when no voltage is applied to the disclosed liquid crystal display, the molecules of the liquid crystal are dispersed in various directions; application of voltage to the liquid crystal device causes the molecules of the liquid crystal to be uniformly aligned. *See* column 7, line 64 to column 8, line 11. As mobile liquid crystal molecules are essential to the invention of Yoshida, Yoshida can not be said to teach or suggest a "liquid crystal layer including a liquid crystal phase that is solidified so as to maintain a molecular orientation of the liquid crystal phase," as recited in claim 1.

Moreover, one of ordinary skill in the art would not have been motivated to employ the protective plate of Yoshida to obtain the optical device of claim 1. The protective plate of Yoshida is provided to give the disclosed liquid crystal display structural strength. *See* column 20, lines 12 to 19. The protective plate of Yoshida is not provided to prevent the liquid crystal layer from being deformed by externally exerted forces. In fact, the front-side substrate of the liquid crystal display of Yoshida can be a flexible substrate. *See* column 20, lines 16 to 19. Because the liquid crystal of Yoshida is not in a solidified state, there is no need to prevent the liquid crystal from being deformed by externally exerted forces and to maintain a liquid crystal layer of uniform thickness. In optical elements such as recited in claim 1, by contrast, if the liquid crystal layer does not have uniform thickness, the degree of polarization of transmitted light will vary, and display quality will be reduced. *See* instant specification, page 3, lines 5 to 17. Yoshida does not recognize such difficulties, or suggest

solutions thereto. Accordingly, the only motivation to modify Yoshida to obtain the optical element of claim 1 is found in the instant specification -- to rely on such motivation to achieve the optical element of claim 1 would require impermissible hindsight. Accordingly, Yoshida does not remotely suggest the optical element of claim 1.

Claim 1 is not anticipated by Yoshida. Claims 3-6 and 10 depend from claim 1 and, thus, also are not anticipated by Yoshida. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

Rejection Under 35 U.S.C. §103

The Office Action rejects claims 2 and 11 under 35 U.S.C. §103(a) over Yoshida in view of U.S. Patent Application Publication No. 2004/0048950 to Nishida et al. ("Nishida"). Applicants respectfully traverse the rejection.

Claim 1 is set forth above. For the reasons discussed in the previous section, Yoshida does not teach or suggest the optical element of claim 1. Nishida does not remedy the deficiencies of Yoshida. The Office Action cites Nishida for its disclosure of an optical element having a protection layer. However, Nishida, like Yoshida, does not teach or suggest an optical element including a liquid crystal layer including a liquid crystal phase that is solidified so as to maintain a molecular orientation of the liquid crystal phase, the liquid crystal layer having a protective layer formed thereon. Accordingly, the combination of Yoshida and Nishida fails to teach or suggest each and every element of claim 1.

Claim 1 would not have been rendered obvious by Yoshida and Nishida. Claims 2 and 11 depend from claim 1 and, thus, also would not have been rendered obvious by Yoshida and Nishida. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-12 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

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